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(54) UNMANNED AERIAL VEHICLE TRACKING AND CONTROL

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ABSTRACT

Apparatuses, systems, and methods for tracking and/or controlling unmanned aerial vehicles (UAVs) as well as tracking UAV controllers (UACs) within a cellular network. A UAV/UAC may provide a cellular network with tracking information such as speed, orientation, altitude, C2 communication quality, C2 communication mode change request, measurement report, RRC status, cell ID, TAC ID, current location of the UAV, and destination of the UAV. The network may forward this information to an unmanned aerial system (UAS) traffic management system (UTM). The UTM may determine, based in part on the tracking information, whether to transfer control of the UAV from the UAC to the UTM. In some embodiments, the UAV/UAC may trigger the UTM to transfer control of the UAV from the UAC to the UTM.

